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ABSTRACT

This compilation of 720 items in the mapping sciences is presented alphabetically by author. The term 'mapping sciences' has been interpreted in a catholic sense, to cover the varied aspects of the three main elements, surveying, photogrammetry, and cartography, as well as their subdivisions and combinations. Map librarianship, professional practice, and both the more simple and more esoteric educational aspects of cartographical concepts have not been included. In addition, the search was confined to the period January 1955 through Fall, 1969. However, it is unselective in the sense that no detailed attempt has been made to sift or grade the articles according to either individual emphasis or relative importance. The compiler has utilized a variety of sources; those of particular value were: Bibliotheca Cartographica and the excellent review of mapping literature in Bulletin du Comite Francais de Cartographie, Geodesy and Cartography, Geodezia es Kartografiya; and, Zeitschrift fur Vermessungswesen. Several tables indicate the other sources of the listings, number of items by year, original language, source, and topic. (Author/DJB)

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EDUCATION AND TRAINING
IN THE MAPPING SCIENCES:
A WORKING BIBLIOGRAPHY

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American Geographical Society, New York 1969

INTRODUCTION

The following bibliography was originally compiled in May-June 1968 as an adjunct to a request from Dr. Shannon McCune, then Director of the American Geographical Society, to complete a detailed questionnaire concerning the possibility of a U.S. National Cartographic Center. During the 18 months since its origin it has experienced two increases in size, and in this final form represents material collected to 1st December 1969.

It is presented, in a simple alphabetical-by-author listing, as an unselective working bibliography. 'Unselective' in the sense that no detailed attempt has been made to sift or grade the articles according to either individual emphasis or relative importance. 'Working' because, in addition to the material being amenable to the normal culling for a user's specific needs, the topic is a continuing and expanding one. Further, both these adjectives adequately convey that pressures of other commitments have prevented any elaboration of the bibliographical form, aside from providing a few tables of descriptive statistical interest.

The compiler has utilized a variety of sources and these are listed subsequent to the introduction. Of particular value in this first tabulation have been Bibliotheca Cartographica, and the excellent reviews of mapping literature in Bulletin du Comité Francais de Cartographie, Geodesy and Cartography (the translated version of Geodeziya i Kartografiya), Geodézia és Kartográfiya and Zeitschrift für Vermessungswesen. Generally speaking the search has been confined to the period January 1955-Fall 1969 inclusive, covering approximately the last 15 years. However, earlier references have been included if cited in articles of a later date, or if considered to be of significant interest. Obviously, with any date limitation the coverage is non-definitive for a complete topic survey; but it can be confidently assumed that the majority of relevant material of the last 15 years, other possibly than some Russian publications, has been gathered together.

A second table lists the number of the cited articles which appeared in different years and gives a general idea of the steady growth in the volume of publication. It is not, of course, to be interpreted in any strict statistical sense, for, as previously mentioned, the listing is undifferentiated as to article significance; and in addition periodic fluctuations are caused in specific years by the presence or absence of international conferences.

Table III is a straightforward accounting of the languages used and indicates the dominance of articles in English and German. The 25 chief sources of the listed entries are given in Table IV. Of these, 22 represent the leading serials out of a total of some 120 which provided citations for the bibliography.

In the 720 articles listed (689 in the main textual body, 31 in the Addenda) the term 'mapping sciences' has been interpreted in a catholic sense, to cover the varied aspects of the three main elements - surveying, photogrammetry and cartography - as well as their subdivisions and combinations.

It is, however, to be noted that map librarianship, professional practice, and both the more simple and more esoteric educational aspects of cartographical concepts have not been included. Topic allocation by title examination is very far from being a foolproof process but a simple breakdown in Table V does give a rough idea of the relative concern of sectionalized interests.

It is inevitable of course that in a compilation of this sort, some errors will have crept in. It is hoped that those of a compositional nature will have been virtually eliminated by checking procedures. Errors detected at the last moment are listed as Errata together with those items undated as received. It should also be noted that some shortcomings lie outside the provenance of the compiler. For example, judging by the number of mistakes which have been detected on bibliographic source material, their errors of compilation or printing are far more prevalent than one would hope. The inability to check many of the journals, or other original sources, inevitably means reproducing the information as received and possibly countenancing errors. Among these are transliteration inconsistencies from the Cyrillic alphabet, incompleteness in citations, confusing abbreviations and spelling mistakes. Where detected, these have been changed or amplified but time restriction has limited this activity.

Bibliographies of this sort, i. e. ones relevant to a dynamic contemporary technology, are almost ephemeral by definition. This one, however, is offered at a time when, not only is education and training in the mapping sciences of critical national and international concern, but interest is also high in its separate informational and bibliographical aspects (e. g. the work of K.H. Meine). The I. C. A. Commission I and the work of K. H. Meine in Bonn for instance, are representative examples of this activity. This compilation is offered as a contribution to such work and will, it is hoped, form a base for future amplification by other workers.

My thanks are due to several people at the American Geographical Society: Miklos Pinther for providing the Hungarian translations, Dr. Roman Drazniowsky for solving several Russian and German language problems, Lynn Mullins for help with the library aspect of the work and to Mrs. Betty O'Connell for typing and checking the manuscript.

Harry Steward
American Geographical Society
December 1969

TABLE I : SOURCES OF BIBLIOGRAPHICAL MATERIAL

A. Serials

(1) Allgemeine Vermessungs Nachrichten, 1968 (1-12), 1969 (1-9).

(2) Bibliotheca Cartographica, Vols. 1-24.

(3) Bulletin du Comité Francais de Cartographie (formerly Bulletin du Comité Français de Cartographie), Issues 1-40.

(4) The Canadian Cartographer (formerly The Cartographer), All issues to December 1968.

(5) Canadian Cartography, Nos. 1-3.

(6) The Cartographic Journal, All issues to December 1968.

(7) Cartography, All issues to February 1969.

(8) Geodesy and Aerophotography, Issues 1967 (4), 1968 (1-4) and "Foreign Literature in the Field of Geodesy", collections for 1962-63-64-65.

(9) Geodesy and Cartography, 1959-61.

(10) Geodézia és Kartográphia, 1966 (1, 2, 6), 1967 (except 3), 1968 (except 4), 1969 (1-4).

(11) Kartographische Nachrichten, 1967 (1-6), 1968 (1-5).

(12) Photogrammetric Engineering, 1955-Oct. 1969 inclusive.

(13) Surveying and Mapping, 1956-June 1969 inclusive.

(14) Survey Review (formerly Empire Survey Review), 1956-July 1969 inclusive.

(15) Zeitschrift für Vermessungswesen, Surveying Literature collations 1956-1968 inclusive.

B. Others

(1) Personal Sources at the University College of Swansea -- i.e. D.H. Maling, C. Tomlinson and the compiler.

(2) "References from References", -- i.e. bibliographic citations in those manuscripts at hand.

(3) A rapid search of current material in the Natural Science Library, University College of Swansea during Summer 1968.

(4) Material received by the Library of the American Geographical Society, Summer 1968-Fall 1969.

TABLE II.

NUMBER OF BIBLIOGRAPHICAL ARTICLES AT SPECIFIED DATES

(a) Post 1955

1969 -- 36 (incomplete)
1968 -- 76
1967 -- 75
1966 -- 68
1965 -- 42
1964 -- 50
1963 -- 56
1962 -- 45
1961 -- 29
1960 -- 44
1959 -- 38
1958 -- 35
1957 -- 35
1956 -- 29
1955 -- 18

(b) Pre 1955

1954 -- 7
1953 -- 4
1952 -- 3
1951 -- 15
1950 -- 2
1946 -- 1
1945 -- 1
1944 -- 1
1943 -- 1
Undated -- 9

TABLE III

COMPARATIVE NUMBERS OF ARTICLES IN SPECIFIED LANGUAGES

(1) English	355
(2) German	224
(3) French	62
(4) Russian	22
(5) Hungarian	17
(6) Polish	15
(7) Italian	6
(8) Japanese	6
(9) Czech	4
(10) Dutch	2
(11) Finnish	2
(12) Serbo-Croat	2
(13) Spanish	2
(14) Finnish	1

TABLE IV

MAIN SOURCES OF BIBLIOGRAPHICAL CITATIONS

(1) Surveying and Mapping	67
(2) Bulletin du Comité Français de Cartographie	39
(3) Zeitschrift für Vermessungswesen	38
(4) Photogrammetric Engineering	37
(5) Kartographische Nachrichten	34
(6) The Canadian Surveyor	31
(7) Conference of Commonwealth Survey Officers	23
(8) Allgemeine Vermessungs Nachrichten	16
(9) Vermessungstechnische Rundschau	15
(10) Geodézia és Kartográfia	15
(11) Geodesy and Cartography	14
(12) Schweizerische Zeitschrift für Vermessungswesen, Kulturtechnik und Photogrammetrie	13
(13) U. N. Cartographic Conferences	13
(14) Przeglad Geodezyjny	12
(15) ACSM-ASP Conventions	12
(16) Professional Geographer	10
(17) Der Vermessungsingenieur	10
(18) The Cartographic Journal	9
(19) Nachrichten der Niedersächischen Vermessungs-und Katasterverwaltung	9
(20) Royal Society, Education in the United Kingdom	9
(21) Survey Review	9

TABLE IV (contd.)

(22) Canadian Cartography	8
(23) Journal, Surveying and Mapping Division, ASCE	8
(24) Geodeziya i Kartografiya	7
(25) Der Polygraph	7

TABLE V.

COMPARATIVE TOPIC COVERAGE BY TITLE ANALYSIS

(1) Surveying	324
(2) Cartography	245
(3) Photogrammetry	51
(4) Surveying and Mapping	35
(5) Geodetic or Topographic Science	17
(6) Surveying and Photogrammetry	10
(7) Geography and Cartography/Mapping	10
(8) Photo-Interpretation	9
(9) Drafting	8
(10) Topography	6
(11) Mine Surveying	3
(12) Hydrographic Surveying	2
(13) Remote Sensing	1

ERRATA

The following compositional errors should be noted:

(1) Reference 13 should come after Reference 18.

(2) Reference 40 should come after Reference 41.

(3) Reference 63 should come after Reference 64.

(4) Reference 91 should come after Reference 90.

(5) Reference 421 should have 66 (volume number), September added to it.

(6) Reference 663 should have 1963 added to "The Conference of Commonwealth Survey Officers".

(7) Reference 688 should come after reference 217.

Omissions: No dates were available for the following references:

46, 99, 130, 268.

STANDARD ABBREVIATIONS

Australian Surveyor. *The Australian Surveyor (Sydney).*

Bol. de Cartoge. *Boletin de Cartografia del Seminario de Estudios Cartograficos (Madrid).*

Bull. Com. Franc. Cart. *Bulletin du Comité Francais de Cartographie (Paris).*

Bull. du Com. Franc. de Tech. Cartogr. *Bulletin du Comité Français de Techniques Cartographiques (Paris).*

Canadian Cartographer. *The Canadian Cartographer (Ottawa).*

Canadian Surveyor. *The Canadian Surveyor (Ottawa).*

Cartographer. *The Cartographer (Toronto).*

Mitt. d. Österreich. Geographischen Gesellschaft. *Mitteilungen der Osterreichischen Geographischen Gesellschaft (Vienna).*

Nachrichten a.d. Karten-und Vermessungswesen. *Nachrichten aus dem Karten-und Vermessungswesen (Frankfurt am Main).*

Nachr. d. Niedersächs. Vermessgs.-u. Katasterverwaltg. *Nachrichten der Niedersächsischen Vermessungs-und Katasterverwaltung (Hanover).*

Nachrichtenbl. d. Vermessungs. verwatg. Rheinfeld-Pfalz. *Nachrichtenblatt der Vermessungsverwaltung Rheinfeld-Pfalz (Koblenz).*

Norsk. T. Jords. Landmal. *Norske Tidsskrift for Jordskifte og Landmaling (Oslo).*

Österreich. Z.f. Vermessungswesen. *Osterreichische Zeitschrift für Vermessungswesen (Vienna).*

Schweizer. Bauz. *Schweizerische Bauzeitung.*

Schweizer. Z.f. Vermessungswesen, Kulturtechn. u. Photogr. *Schweizerische Zeitschrift für Vermessungswesen, Kulturtechnik und Photogrammetrie (Winterthur).*

Tijd. Kad. Landm. *Tijdschrift voor Kadaster en Landmeetkunde (The Hague).*

Tijdschr. Kon. Ned. Aardr.Gen. *Tijdschrift van het Koninlijk Nederlandsch Aardrijkskundig Genootschap (Amsterdam).*

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